

**Amendment and Response**

Applicant(s): VOROBA et al.

Group Art Unit: 2684

Serial No.: 09/542,708

Filed: April 4, 2000

For: LOW POWER INFRARED PORTABLE COMMUNICATION SYSTEM WITH WIRELESS RECEIVER AND METHODS REGARDING SAME

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**Remarks**

The Office Action mailed May 24, 2004 has been received and reviewed. The Office Action identifies claims 2, 4-5, 17-27, and 36-42 as "withdrawn" claims. In Applicants' Amendment and Response filed March 24, 2004, these claims (claims 2, 4-5, 17-27, and 36-42) were *canceled* by Applicants. Thus, the claims 2, 4-5, 17-27, and 36-42 are *canceled*.

No claims have been amended in this response. As such, the pending claims include claims 1, 3, 6-16, and 28-35. Reconsideration and withdrawal of the rejections are respectfully requested in view of the remarks provided herein.

**Attorney Docket Number**

Please note that the Attorney Docket Number has changed from 129.00100101 to **316.0010 0101**. Please refer to the new Attorney Docket Number (**316.00100101**) in all future correspondence and/or communications.

**The 35 U.S.C. §103 Rejection**

**Claims 1, 3, 6-8, 12, 14-16, and 28-35**

The Examiner rejected claims 1, 3, 6-8, 12, 14-16, and 28-35 under 35 U.S.C. §103(a) being obvious over Sulavuori et al. (U.S. Patent No. 5,636,264) in view of Holakovszky et al. (WO 99/34576). However, in the expressed rejection, the Examiner further relies on Strohallen et al. (U.S. Patent No. 5,568,516). In other words, it is unclear exactly which references the Examiner is using in the rejection of claims 1, 3, 6-8, 12, 14-16, and 28-35.

However, Applicant respectfully traverses the Examiner's rejections and submits that the present invention as recited in such rejected claims is not obvious in view of Sulavuori et al., Holakovszky et al., or Strohallen et al., either alone or in combination with one another.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the

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knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art references must teach or suggest all the claim limitations. *See* M.P.E.P. §2143.

Applicants respectfully assert that the Office Action does not establish all of these criteria, and therefore fails to set forth a *prima facie* case of obviousness.

For example, claim 1 describes a portable communication system that includes an infrared receiver apparatus and claim 28 describes a portable infrared receiver apparatus. The infrared receiver apparatus described in claims 1 and 28 includes a receiver housing enclosing a speaker and demodulation circuitry and upon which the infrared light detection device is mounted. The receiver housing is formed to be self-supported entirely by the ear of a user.

Sulavuori et al. does not describe an infrared receiver apparatus that includes a receiver housing enclosing a speaker and demodulation circuitry and upon which an infrared light detection device is mounted; where the receiver housing is formed to be self-supported entirely by the ear of a user. The Examiner alleges that such a receiver is described with reference to Figure 4B and column 6, line 60-column 8, line 30. However, Sulavuori et al. does not describe a receiver housing that is self-supported entirely by the ear of a user. The only receiver described in Sulavuori et al. is part of a handset. In other words, the handset 4 that includes the infrared light detection device 206 does not include a receiver housing that is self-supported entirely by the ear of a user.

Strohallen et al. also does not describe a portable infrared receiver apparatus that includes a receiver housing enclosing a speaker and demodulation circuitry and upon which the infrared light detection device is mounted; where the receiver housing is formed to be self-supported entirely by the ear of a user. The Examiner alleges on page 4 and 5 of the Office Action that such a receiver is described with respect to the cordless headset 400. However, as clearly set forth in the specification of Strohallen et al. in column 28, the cordless headset 400 includes a TVM magnetic receiver 404 and a TVM transmitter 410 that may incorporate an RF, infrared, or

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other suitable transmitter. In other words, the cordless headset 400 includes TVM magnetic receiver and not an infrared receiver as described in claim 1 or claim 28.

The Examiner further states on page 3 and page 5 of the Office Action that Strohallen et al. indicates that the "headset receives infrared (column 6, lines 25-30)." As is clear from the column 6, lines 25-30 and the remainder of the specification, Strohallen et al. does not indicate that a "headset receives infrared." Column 6, lines 25-30 states that "a cordless headset using Time Variant Modulation (TVM) for reception of a magnetic signal and TVM of RF or infrared, or other communication modes, as the transmitter offers advantages over prior art cordless headsets which use only infrared or RF for both transmission and reception." This language does not say that the "headset receives infrared," but rather indicates that the transmission from the headset may be infrared or RF, just like the remainder of the specification further supports. For example, as set forth above, as clearly set forth in the specification of Strohallen et al. in column 28, the cordless headset 400 includes a TVM magnetic receiver 404 and a TVM transmitter 410 that may incorporate an RF, infrared, or other suitable transmitter. In other words, the cordless headset 400 includes TVM magnetic receiver and not an infrared receiver as described in claim 1 or claim 28.

Holakovszky et al. also does not describe an infrared receiver apparatus that includes a receiver housing enclosing a speaker and demodulation circuitry and upon which an infrared light detection device is mounted; where the receiver housing is formed to be self-supported entirely by the ear of a user. Holakovszky et al. describes a headset that includes two earphones connected by a flexible frame. The earphones (i.e., the receiver/transmitter) are held in the ears by a light pressing force of the flexible frame. The headset described in Holakovszky et al. must be positioned in both ears. "When the headset is worn on the head, the cases of the earphones protrude into the deeper middle part of the *left and the right ear*, respectively, and the earphones are held in the *ears* by the light pressing force of the U-shaped flexible frame...." (See page 1 of Holakovszky et al.) (emphasis added). Holakovszky does not teach a receiver housing that is formed to be self-supported entirely by the ear of a user as described in claim 1 and claim 28.

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As such, for at least the above reasons, the references cited by the Examiner do not teach or suggest all the claim limitations of claim 1 and claim 28, and therefore, claim 1 and claim 28 are not obvious in view thereof. In addition, there is no motivation or suggestion to combine the references cited.

Further, as claims 3, 6-8, 12, and 14-16 depend on claim 1, either directly or indirectly, they include the limitations thereof. As such, these claims are also not obvious in view of the cited references for the same reasons as discussed above and by reason of their own limitations.

For example, with respect to claims 6-7, there is nothing in the cited references that teach or suggest an in the ear or behind the ear receiver that includes an infrared receiver.

Further, for example, with respect to claim 8, there is nothing in the cited references that teach or suggest the structure according to the present invention that allows the receiver of claim 8 to be switched from one ear to the other (e.g., speaker holding element that includes an opening defined therethrough sized and configured to receive a speaker from either end of the opening).

Further, as claims 29-35 depend on claim 28, either directly or indirectly, they include the limitations thereof. As such, these claims are also not obvious in view of the references cited for the same reasons as discussed above and by reason of their own limitations.

For example, with respect to claim 29, there is nothing in the references cited that shows an elongated portion of a receiver housing upon which an infrared light detection device is positioned. Strohallen et al. shows an ear supported device in Figure 21, but it does not include the elements of claim 29.

Further, for example, with respect to claims 30-31, there is nothing in the references that describe the structure according to the present invention that allows the receiver of claims 30-31 to be switched from one ear to the other (e.g., speaker holding element that includes an opening defined therethrough sized and configured to receive a speaker from either end of the opening).

In view of at least the above, Applicant respectfully requests that the rejection of claims 1, 3, 6-8, 12, 14-16, and 28-35 be withdrawn.

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**Claims 9-11 and 13**

Claims 9-11 and 13 were rejected by the Examiner under 35 U.S.C. §103(a) as being obvious in view of Sulavuori et al. (U.S. Patent No. 5,636,264) in view of May (U.S. Patent No. 5,446,783) and further in view of Strohallen et al. (U.S. Patent No. 5,568,516).

Claims 9-11 and 13 depend on claim 1, either directly or indirectly. Therefore, they include the limitations of claim 1. As such, these claims are also not obvious in view of the references cited for the same reasons as discussed above and by reason of their own limitations.

Further, May describes a battery pack that is removably mounted on the back of a cellular phone. The battery pack contains an infrared port 51 for transmitting infrared information between the cellular phone and a computer (i.e., capable of sending and/or receiving infrared signals). A device interface 25 and passthru device interface 55 are connected to the infrared convertor 60 which converts electrical information to infrared information for transmission between the cellular phone and the computer via the infrared port 51.

Just like the other references cited by the Examiner, May also does not describe an infrared receiver apparatus that includes a receiver housing enclosing a speaker and demodulation circuitry and upon which an infrared light detection device is mounted; where the receiver housing is formed to be self-supported entirely by the ear of a user. As such, May does not cure any of the deficiencies of the other references. Therefore, for at least the above reasons, claims 9-11 and 13 are not obvious over the cited references. It is respectfully requested that such rejections be withdrawn.

**Summary**

It is respectfully submitted that the pending claims are in condition for allowance and notification to that effect is respectfully requested. The Examiner is invited to contact

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Applicants' Representatives, at the below-listed telephone number, if it is believed that prosecution of this application may be assisted thereby.

Respectfully submitted for

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24 Nov 2004

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**CERTIFICATE UNDER 37 CFR §1.10:**

"Express Mail" mail no: EV 405 491 090 US Date of Deposit: 24 November 2004

The undersigned hereby certifies that this paper is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR §1.10 on the date indicated above and is addressed to MAIL STOP AMENDMENT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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